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ABSTRACT

This report analyzes trends in childbearing among Kentucky's adolescents from 1970 through 1977 and reviews childbearing patterns in Kentucky and in the United States for adolescents aged 10-14 and 15-19 to identify several factors associated with adolescent pregnancy. The fact that adolescent women are reaching biological maturity at an earlier age is cited as one factor that explains the increased numbers of teenage pregnancies. Other causes of adolescent pregnancy are delineated, including increased and earlier initiation of sexual activity, the nonuse or ineffective use of contraceptives, and planned pregnancies. Several consequences of teenage pregnancy are explored, and trends in abortion, adoption, and marriage are examined. The social, economic, biological and emotional consequences of adolescent childbearing are discussed along with the health risks to mother and baby. Strategies for intervention are presented that emphasize the adolescent's need for accurate information about sex and birth control, as well as the availability of health and family planning services. Although geographically specific, this report reflects an issue of great importance in the United States today. (NRB)

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Kentucky Women Challenges & Prospects

Trends in Adolescent Childbearing in Kentucky: 1970-1977

University of Kentucky • College of Agriculture
Agricultural Experiment Station • Department of Sociology

CG 015542

TRENDS IN ADOLESCENT CHILDBEARING IN KENTUCKY: 1970-1977

*Verna Keith and Lorraine Garkovich**

Introduction

"There is a great deal of information available about sex, reproduction, contraception, the effects of too early childbearing, services for teenagers, and so forth, but little of it appears to be in the hands of the adolescents involved" (Baldwin, 1980:31).

In 1977 there were more than 10 million American women aged 15-19, and 4 out of every 10 were sexually active. These young women accounted for nearly 560,000 or 17% of all births in the U.S. Additionally, more than 4 out of every 10 births to these adolescent women were illegitimate. Simultaneously, increases in the mortality and morbidity (incidence of disease or illness) rates of adolescent women and their children have led to the classification of adolescents as a "high risk group." The U.S. adolescent childbearing rates are among the highest in the world. Finally, recent national surveys indicate that premarital intercourse is beginning at younger ages, and suggest that the incidence of premarital intercourse is increasing. It is apparent from these trends that adolescent pregnancy and childbearing should be a growing concern for Americans.

This report will focus on three issues: **(1)** a description of recent trends in childbearing among Kentucky's adolescents; **(2)** a review of the factors associated with adolescent pregnancy and childbearing; and **(3)** a discussion of some strategies for ameliorating the incidence and consequences of adolescent pregnancy and childbearing.

Patterns of Adolescent Childbearing in Kentucky and the Nation

Older Adolescents (Ages 15-19)

Overall, while the total number of births to older adolescents decreased between 1970 and 1977, these women also exhibited a substantial increase in the number of illegitimate births. Additionally, while the number of births to older adolescents living in metropolitan areas of the state is declining, older teens in nonmetropolitan counties are continuing to have more children.

The birth rate[1] of Kentucky's older teens declined from 1971 (88.6) to 1977 (74.2); the statistics represent a 3% decrease in the total number of births to these women (Figures 1, 2 and Tables 1, 2). Despite this decline, by 1977 the birth rate of these older adolescents nearly equalled that of all women aged 20-44 (74.8), and exceeded that of their counterparts across the nation (53.7).

While the birth rate of older teens declined during the '70s, the proportion of their births[2] which were illegitimate increased markedly. In 1970, nearly 2 out of every 10 births to older adolescents were illegitimate (Table 3), and nearly 3 out of 10 were illegitimate in 1977, representing a 42% increase (Figure 2, Table 2). Yet the proportion of all births which occurred out-of-wedlock among the nation's older adolescents was even higher. In 1977, 43% of all births to these women were illegitimate.

Historically, birth rates in rural areas have been higher than those in urban areas; and Kentucky is no exception. While the total number of births to all older adolescents declined during the '70s, this did not occur in all geographic areas of the state. The total number of births to those older adolescents living in metropolitan[3] areas decreased by 14.7%, while their counterparts in the nonmetropolitan counties posted a substantial increase (68.6%) in their total births (Figure 3, Table 4). However, all of these women evidenced a drop in their birth rates (Figure 4, Table 1). The discrepancy between a declining birth rate and an increase in the total number of births is explained by the substantial increase in the number of women in this age group during the period.

There are also differences between metropolitan and nonmetropolitan older adolescents in the proportion of all births which are illegitimate. In 1970, 258 of every 1,000 births to older metropolitan teens were illegitimate compared to 141 per 1,000 births to nonmetropolitan teens. Both groups posted an increase in the proportion of illegitimate births through the '70s with metropolitan teens having 423 illegitimate for every 1,000 births and nonmetropolitan teens have 194 illegitimate for every 1,000 births. However, the rate of increase in the number of illegitimate births to nonmetro teens (46.3%) was greater than that for metropolitan teens (39.7%) (Figure 3, Table 4).

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Younger Adolescents (Ages 10-14)

Overall, Kentucky's younger adolescents experienced substantial increases in their total births as well as the number of illegitimate births. Additionally, younger teens in nonmetropolitan places posted larger increases than their counterparts in the metropolitan counties of the state.

Although their birth rate remained constant during the '70s (Figure 1, Table 1), Kentucky's younger adolescents did post a 23.6% increase in their total births (Figure 2, Table 2). As with Kentucky's older teens, the birth rate of Kentucky's younger adolescents exceeds that of similarly aged women in the U.S.

The proportion of illegitimate births to all births for Kentucky's younger adolescents declined slightly from 1970 to 1977 (Figure 2). In 1970, 75% of all births to these women were illegitimate and by 1977 this had dropped to 65% of all births (Table 3). However, even though the proportion of illegitimate births declined, their total number increased by 15%. This apparent discrepancy is explained by the major increase in the total number of births to these younger adolescents. Again, the ratio of illegitimate births among the nation's younger teens is higher than for their Kentucky counterparts.

A comparison of the childbearing patterns of younger adolescents in metropolitan and nonmetropolitan counties in Kentucky reveals some major differences. Between 1970 and 1977, younger teens in metropolitan areas posted a 3.6% ***decline*** in their total births, compared to a 38.6% ***increase*** in total births for younger teens in nonmetropolitan counties (Figure 3, Table 4). However, the birth rates for younger teens in metropolitan ares (1.6) still slightly exceeds that of nonmetropolitan teens (1.5) (Figure 4, Table 1).

Differences are also apparent in changes in the number and ratio of illegitimate births. Among metropolitan younger teens, the '70s saw a 2.2% increase in the total number of illegitimate births, and an increase in the proportion of illegitimate births to all births from 804 to 852 per 1,000 (Figure 3, Table 4). Younger adolescents in nonmetro counties, on the other hand, experienced a 42.2% increase in the total number of illegitimate births, and an increase in the proportion of illegitimate births to all births from 542 to 557 per 1,000 (Figure 3, Table 4).

Summary of Trends

What conclusions can be drawn from this analysis of adolescent childbearing in Kentucky? Slightly more than 1 in every 5 births (22.2%) in Kentucky are to women under the age of 20 compared to slightly less than 1 in 5 (19.2%) across the nation. In both Kentucky and the nation, illegitimacy is increasingly concentrated in the teenage years. In 1977, 52% of all illegitimate births in Kentucky occurred to women under the age of 20, while the comparable figure for the nation was 53%. Additionally, teens accounted for 58% of the increase in illegitimate births in Kentucky for the period 1970-1977.

Overall, the ratio of illegitimate to legitimate births in Kentucky is increasing; and national studies indicate that while the proportion of births conceived out-of-wedlock remained at about 50% between 1960 and 1974, the number of these conceptions "legitimized" by marriage has declined substantially from 65% to 35%. Obviously, fewer teenage women are inclined to select marriage when an out-of-wedlock conception occurs. One study of adolescent mothers in New York found that more than half of the young women who had borne their child out-of-wedlock did not want to marry the father because they did not have a favorable evaluation of the man's ability to fulfill the roles of husband and father.

Finally, teens account for 20% of all births in metropolitan areas, and 23% of all births in nonmetropolitan counties. Adolescent women accounted for 52% of all illegitimate births in metropolitan and nonmetropolitan areas. While this ratio remained constant during the '70s for adolescent women in metropolitan areas, teens in nonmetropolitan places increased their share of all illegitimate births from 46% in 1970 to 52% in 1977.

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[1]A birth rate is the number of births per 1,000 women in a selected age group i.e., 10-14, 15-19, 20-24, etc. Differences between these data and those reported by the Department of Human Resources, Bureau for Health Services, Health Information System Branch in ***Kentucky: Selected Vital Statistics and Planning Data*** for the years under study are attributable to our use of women aged 10-44 as the population at risk compared to their use of women aged 15-44 as the base population.

[2]The ratio of illegitimate births to all births is calculated as follows:

$$\frac{\text{Number of illegitimate births to specific age groups}}{\text{Total number of births to specific age group}} \times 1{,}000$$

The percent change in illegitimate births is calculated as follows:

$$\frac{\text{(Number of illegitimate births, 1977) - (Number of illegitimate births, 1970)}}{\text{Number of illegitimate births, 1970}} \times 100$$

The percent distribution of births by legitimacy status is calculated as follows:

$$\frac{\text{Number of illegitimate births}}{\text{Total number of births}} \times 100$$

[3]Metropolitan counties are the 17 constituent counties of Kentucky's 7 Standard Metropolitan Statistical Areas. The counties are: Boone, Bourbon, Boyd, Bullitt, Campbell, Christian, Clark, Daviess, Fayette, Greenup, Henderson, Jefferson, Jessamine, Kenton, Oldham, Scott, and Woodford. All the other counties of the state are classified as nonmetropolitan.

Table 1.—Birth Rates[1] by Age and Place of Residence for Selected Years: Kentucky and U.S.

	1971	1973	1975	1977
Total Birth Rate	72.4	61.6	60.7	63.1
Women 20-44	89.5	72.6	70.9	74.8
Women 15-19	88.6	82.6	78.6	74.2
Women 10-14	1.6	1.7	1.7	1.6
Metropolitan Places				
Women 20-44	88.1	72.2	69.3	74.3
Women 15-19	84.7	75.8	69.6	64.3
Women 10-15	1.8	1.9	1.8	1.6
Nonmetropolitan Places				
Women 20-44	90.9	73.0	72.5	75.4
Women 15-19	93.3	88.7	86.7	82.9
Women 10-14	1.2	1.4	1.6	1.5
U.S. Birth Rates				
Women 15-19	64.7	59.7	56.3	53.7
Women 10-14	1.1	1.3	1.3	1.2

[1] Birth rates calculated on the basis of the number of recorded births to all women in a particular age group. Size of the population at risk (women aged 10-14) derived by assuming the change in the number of women in that age group between 1970-1977 evenly distributed through period.

Table 2.—Kentucky Births by Age of Women and Legitimacy Status, 1970-1977

	Numbers			Percent Distribution	
	1970	1977	% Change 1970-1977	1970	1977
Total Births	60,373	58,429	- 3.2	100	100
Women 20-44	47,044	45,451	- 3.4	77.9	77.8
Women under 20	13,329	12,968	- 2.7	22.1	22.2
Women 15-19	13,134	12,737	- 3.0	21.8	21.8
Women 10-14	195	241	+23.6	.3	.4
Illegitimate Births	5,392	8,307	+57.1	100	100
Women 20-44	2,696	4,504	+67.1	50.0	54.2
Women under 20	2,698	3,803	+41.0	50.0	45.8
Women 15-19	2,563	3,647	+42.3	47.5	43.9
Women 10-14	135	156	+15.6	2.5	1.9

Table 3.—Ratio of Illegitimate Births[1] Per 1000 Live Births to Women in Kentucky and the U.S. for Selected Years

	1971	1973	1975	1977
Total for Kentucky	93.9	108.6	116.1	125.1
Women 20-44	56.6	62.6	69.4	77.1
Women 15-19	209.9	236.2	252.5	266.3
Women 10-14	750.0	691.1	669.3	647.3
Total for United States				
Women 15-19	308.9	339.0	383.1	428.7
Women 10-14	791.7	838.5	870.1	881.7

[1]Ratios based on recorded number of illegitimate births divided by the recorded number of all births x 1000.

Table 4.—Births by Place of Residence and Legitimacy Status of Kentucky's Adolescent Women, 1970-1977

	Numbers			Percent Distribution	
	1970	1977	Change	1970	1977
Metropolitan Places					
Total Births women under 20	6,146	5,258	-14.5	100	100
Women 15-19	6,304	5,150	-14.7	98.2	97.9
Women 10-14	112	108	- 3.6	1.8	2.1
Illegitimate Births women under 20	1,649	2,270	+37.7	100	100
Women 15-19	1,559	2,178	+39.7	94.5	95.9
Women 10-14	90	92	+ 2.2	5.5	4.1
Nonmetropolitan Places					
Total Births women under 20	7,183	7,720	+ 7.5	100	100
Women 15-19	7,100	7,587	+68.6	98.8	98.3
Women 10-14	83	115	+38.6	1.2	1.7
Illegitimate Births women under 20	1,049	1,533	+46.1	100	100
Women 15-19	1,004	1,469	+46.3	95.7	95.8
Women 10-14	45	64	+42.2	4.3	4.2

Figure 1.—Birth Rates by Age of Kentucky Women and U.S. Adolescents: 1971, 1977

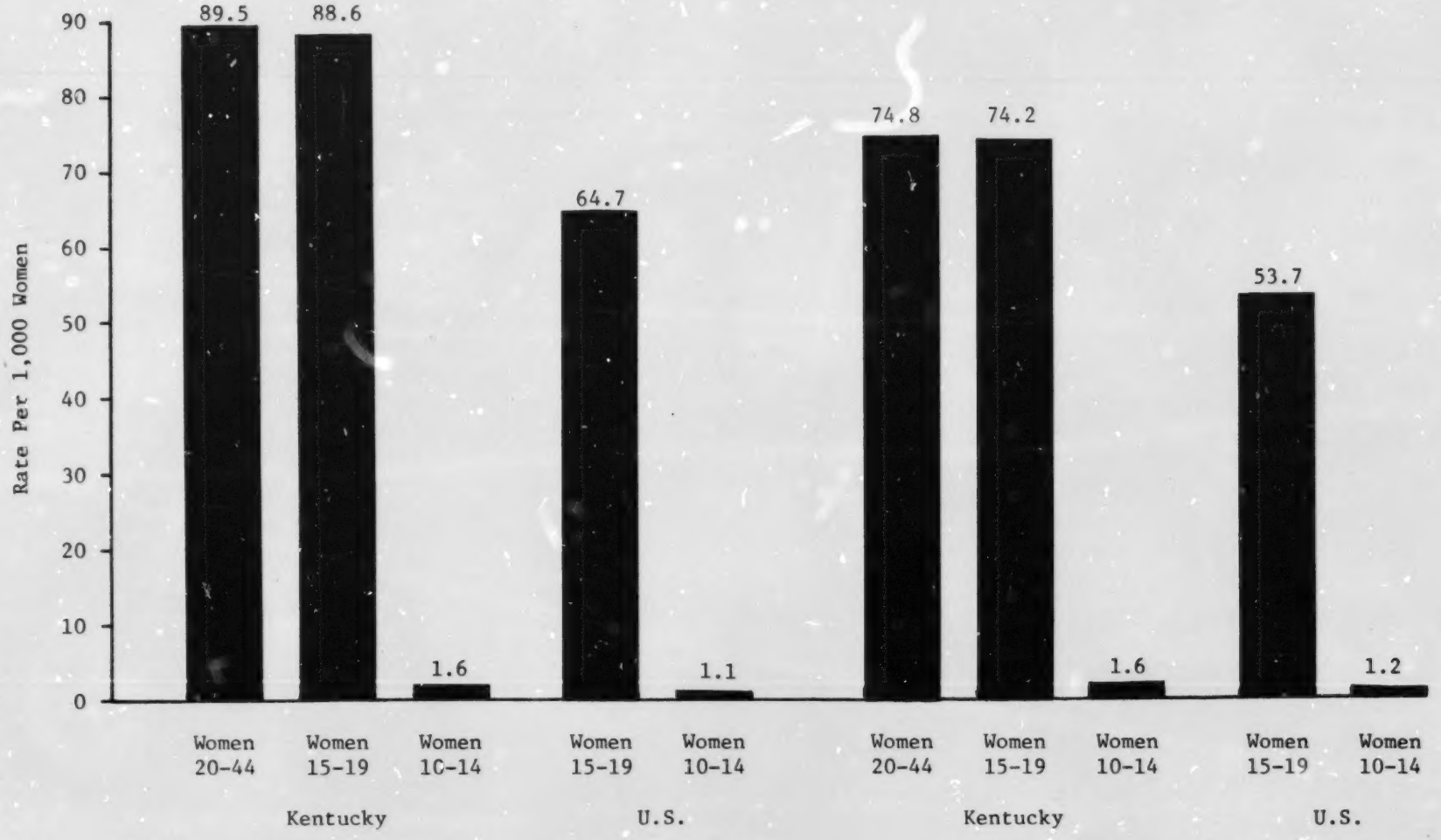


Figure 2.—Change in Kentucky Births by Age of Women and Legitimacy Status, 1970-1977

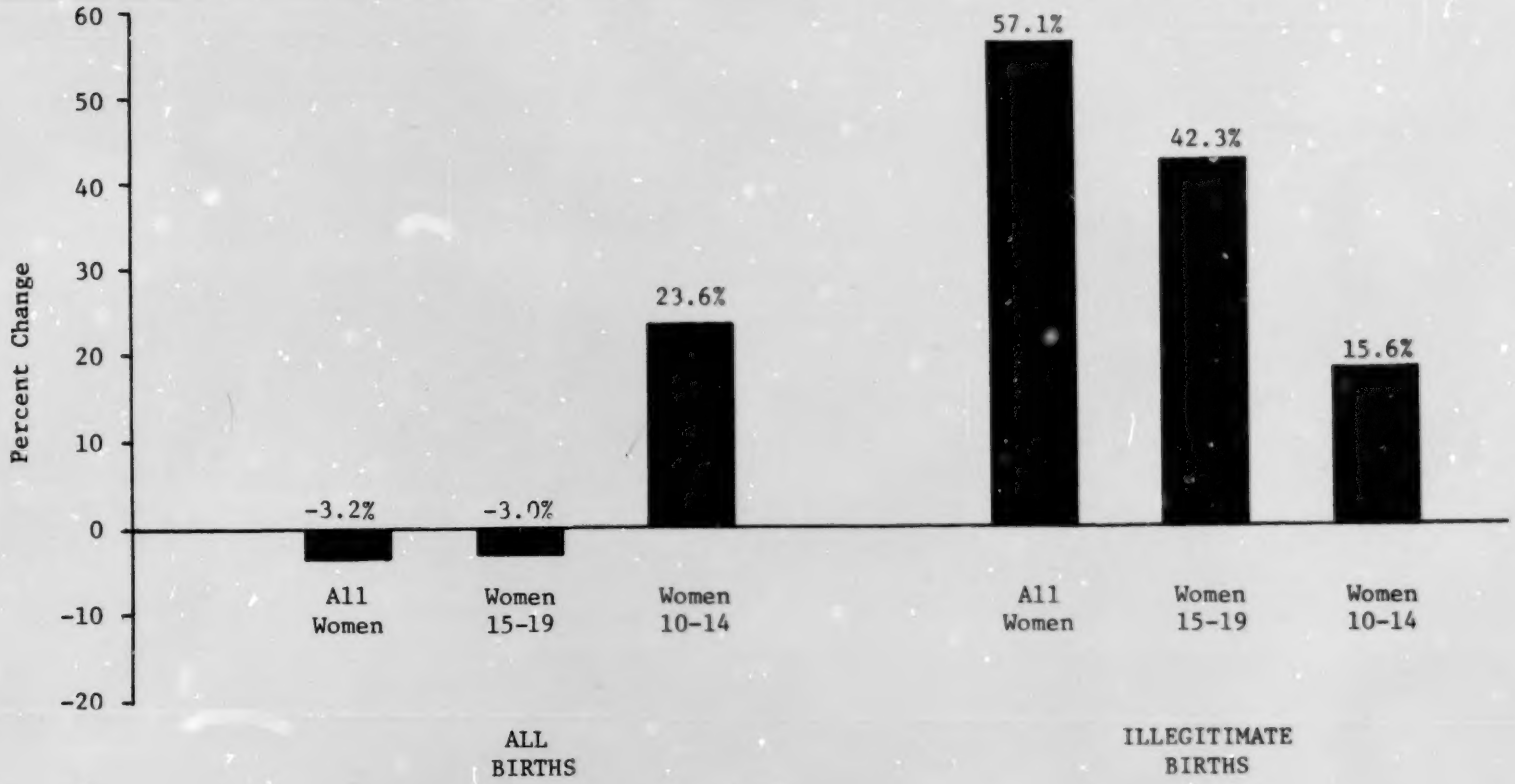


Figure 3.—Percent Change in Births to Kentucky's Adolescents by Place of Residence and Legitimacy Status, 1970-1977

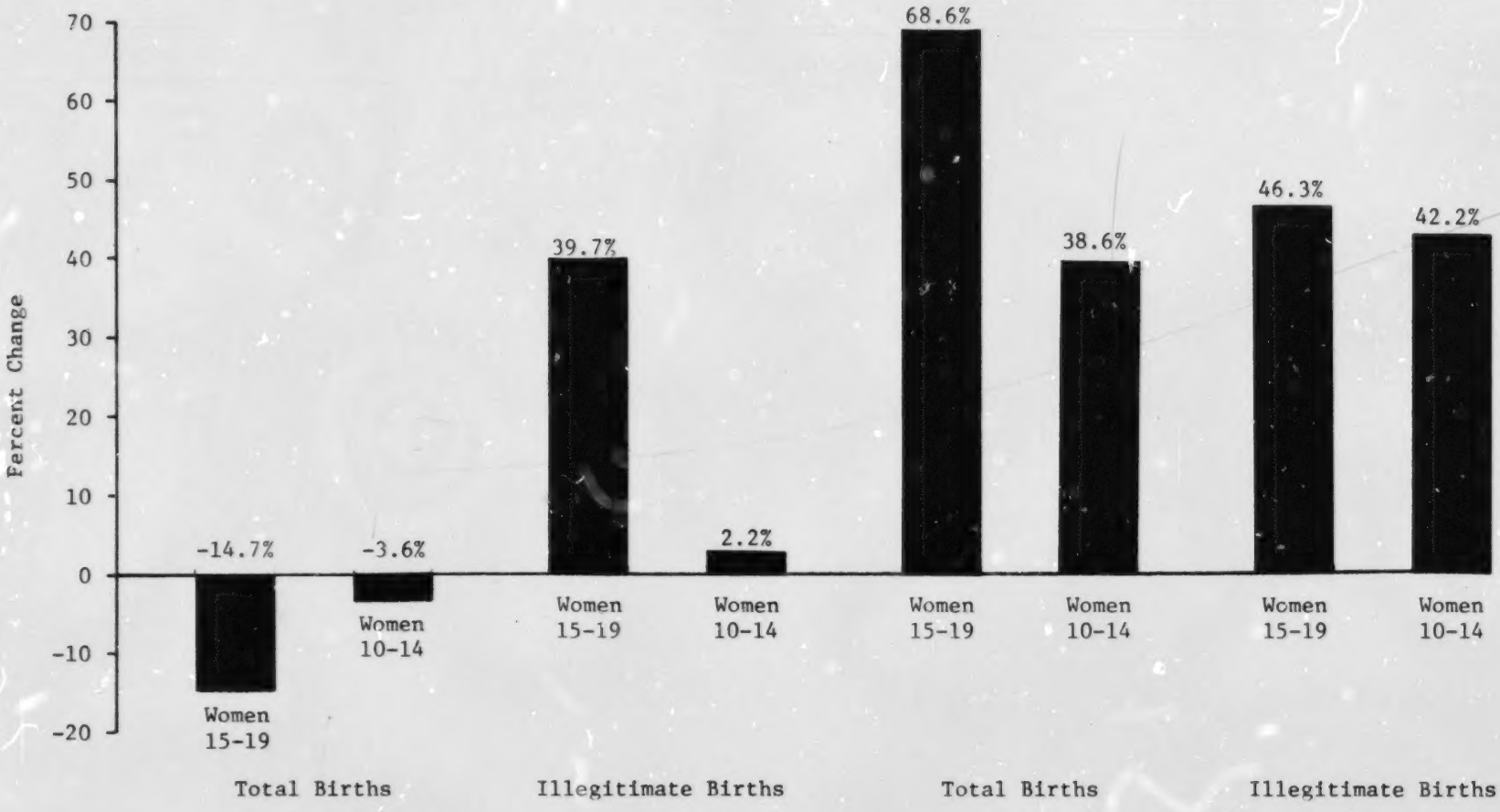
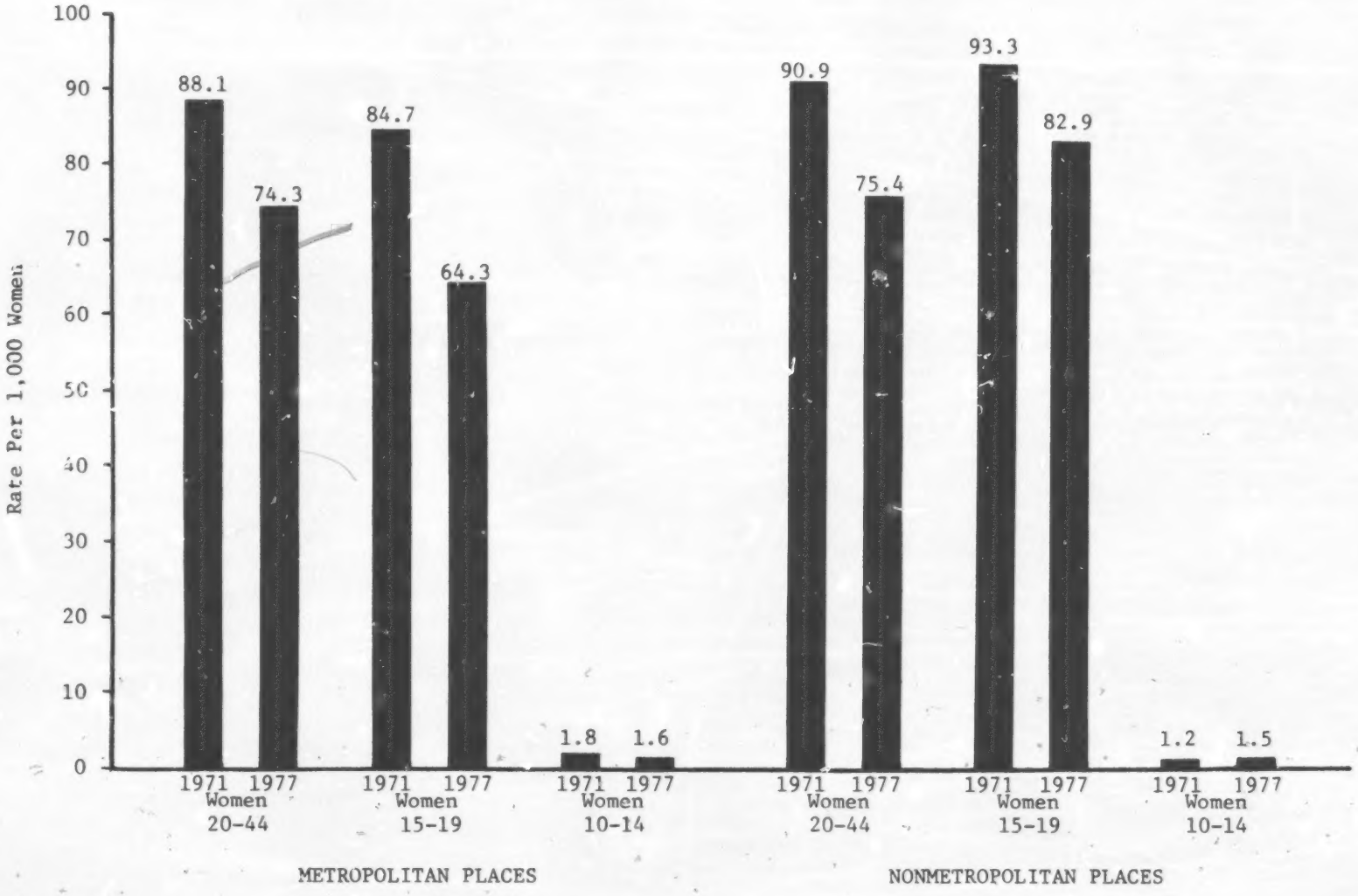


Figure 4.—Birth Rates of Kentucky Women by Place of Residence: 1971, 1977



Factors Contributing to Adolescent Pregnancy

Analysis of adolescent pregnancy in Kentucky reveals that the numbers and rates are increasing. This section will review some of the factors contributing to the growing number of teenage pregnancies and conclude with a discussion of the social, economic, and biological consequences of adolescent pregnancy. The bases for this analysis are a series of national studies on adolescent pregnancy, since little or no information specific to Kentucky is available. In the past, explanations of adolescent pregnancy tended to focus on single causes—a "bad" or "wild" girl—but now there is general consensus that there are multiple explanations.

The general health of adolescent females is an indirect but important factor in explaining teen pregnancy. Improved living conditions, nutrition, and health care have contributed to the earlier physical development of adolescents. Young girls begin menstruation at an increasingly earlier age (12.7), thus lowering the average age (14.7) at which first pregnancy can occur. However, some women begin menstruation even earlier than 12.7 years and so become fertile earlier than 14.7 years. Hence, adolescent women, reaching biological maturity at an age earlier than ever before, increase the time during which pregnancy is possible.

Because the biological ability to conceive is not a sufficient explanation of the rising number of teen pregnancies, more immediate causes of adolescent pregnancy center around three other conditions: **(1)** increased and earlier initiation of sexual activity; **(2)** the nonuse or ineffective use of contraceptives; and **(3)** to a very limited extent, planned pregnancies.

Sexual Activity

Sexual activity is widespread among adolescents. It is estimated that 4 out of every 10 women aged 15-19 and 2 out of 10 of the 12-14 year olds in America are sexually active. Although the exact proportions of sexually active adolescent females may vary to a small degree among various studies, they all confirm earlier and increasing sexual activity among teens.

When discussing adolescent sexual behavior, the term "sexually active" must be used with caution. Sexually active does not mean that adolescents are promiscuous. Several studies indicate that more than half of the sexually active teens have only one partner. This suggests that the majority of teens do not engage in what is traditionally called "promiscuous" behavior. However, the number of partners usually increases with age.

In summary, more married female adolescents are having intercourse, initiating sex at an earlier age, and to a slight degree, having more partners than they did a decade ago. Many teens are frequently under considerable social pressure, especially from peers, to "have sex." Some of the arguments used are that "everyone is doing it," and "you're different if you don't." Many adolescent girls report that they engage in sexual relations due to pressure exerted by males; and under different circumstances, many would wait at least until their late teens to begin sexual activity. Hence, the norms, or guidelines for behavior, of the adolescent subculture often encourages sexual activity. Indeed, it could be argued that sexual activity is seen as one of the rites of passage from adolescence to adulthood. What must be kept in mind is that sexual activity does not have to result in pregnancy; early and effective use of contraceptives can prevent adolescent sexual activity from becoming adolescent pregnancy.

Nonuse and Ineffective Use of Contraception

Although many teens are engaging in sexual activity, the use of contraceptives is not keeping pace. Adolescents do not use contraceptives consistently or rely upon the most effective methods. Several studies of sexually active teens indicate that 4 out of 5 engage in unprotected sexual activity.

Whether a contraceptive method is used depends on the woman's age, her educational aspirations, and her mother's educational background. Older adolescents (18-19) tend to engage in more sexual activity, and they are also more likely to use a contraceptive method consistently. While more frequent intercourse may encourage them to be more consistent, it is not clear whether they use contraceptives because they are at increased risk of pregnancy or because some characteristics of the relationships, such as stability or communication, remove some of the barriers to effective contraception. Since consistent use of contraceptives is associated with the teen's educational aspirations and her mother's educational attainment, it is possible that these women see early pregnancy as a possible barrier to improving or enhancing their status.

NONUSE: Why do teens engage in unprotected intercourse? Numerous studies indicate there are three primary reasons for engaging in unprotected sexual activity. The most frequently cited reasons for unprotected intercourse among teens are: **(1)** the assumption that they could not become pregnant; **(2)** the unavailability of contraceptives; or **(3)** moral or hedonistic objections to the use of contraceptives.

The overwhelming majority of nonusers—70% in a national survey of sexually active teens—state they did not use contraceptives because they did not think they

could become pregnant. This disbelief was grounded in assumptions such as: intercourse occurred during a "safe" time of the month, they were too young to get pregnant, or a belief in their subfecundity. In essence, these young women discounted the risk of unprotected intercourse on the basis of inaccurate or inadequate information. The most commonly cited reason by adolescents for not using a contraceptive was because intercourse occurred during their "safe" time of the month. This would be reasonable if teens were able to identify that "safe" period during the month. In general, however, teens are not aware that the middle of the monthly cycle is their most fertile, and hence most unsafe, time. For example, one study found that only 41% of unmarried women age 15-19 could correctly note the time of greatest pregnancy risk and even among 19 year olds, less than half could indicate the time of greatest risk. Essentially, these adolescents are utilizing the contraceptive method of rhythm; yet even women with regular cycles have difficulty in actually determining the period of greatest risk, especially if they do not know that their cycle begins with the first day of menstruation rather than the last. Teens, who often do not have regular menstrual cycles, will have even greater difficulty in successfully utilizing the rhythm method as a form of contraception.

Other adolescents discount the risk of pregnancy and do not use contraceptives because they assume they are too young or have intercourse only infrequently. Since many young women do not begin to ovulate at the same time their menstrual cycle begins, there is a period of time in which, although menstruating, adolescent women cannot become pregnant. However, most young women do not know when ovulation occurs; and some women have become pregnant before having a menstrual cycle. Additionally, although frequency of intercourse is somewhat related to risk of becoming pregnant, the risk is not equal throughout the menstrual cycle. Low frequency can be associated with high risk *if* intercourse occurs during the middle of the monthly cycle. Hence, a large number of adolescent women who do not use a contraceptive method during intercourse are gambling that their knowledge of their menstrual cycle permits them to utilize the rhythm method effectively; or they are relying upon the false belief that their tender age or relative inexperience will somehow protect them from pregnancy. It is likely that a large number of these young women found themselves among the 13,000 pregnant Kentucky adolescents in 1977.

The second most frequently cited reason for unprotected intercourse among adolescents is the unavailability of contraceptives or unfamiliarity with the types of contraceptives and their use. Although adults often assume that contraceptive information and devices are readily available to young persons, one national survey reveals that 3 out of 10 teenagers had problems getting contraceptives even though they wanted to be protected. Kentucky is one of 26 states which permits the prescription of contraceptives to adolescents without parental consent, but many adolescents report they do not know where to go for contraceptive services or believe that they are too expensive to use.

A final category of reasons for not using contraceptives involves medical, hedonistic, and moral objections to contraceptive devices. The medical objections center on the possible health dangers associated with different contraceptive methods, while the hedonistic objections focus on the "interference with pleasure" associated with the nonmedical contraceptive methods (foam, jellies, condoms). Moral objections to contraceptives usually involve the belief that it is immoral to plan ahead for sex. A number of adolescents, although sexually active, believe that they should not be having intercourse. Sexual intercourse that is spontaneous—and hence unprotected—is not immoral because it was not planned. In other words, "it (sex) just happened." The use of contraceptives indicates that one has planned the act and made a conscious decision to engage in sexual intercourse. In one study, 17% of the teens visiting a clinic for contraceptive services gave "I shouldn't have intercourse" as a reason for not previously using contraceptives; and one can assume the number is even higher among sexually active teens who have not visited a clinic for contraceptive services. This position may be attributed to "an upbringing in which the virginity code has been stressed without a discussion of reasons, risks, and alternate viewpoints." When other pressures prevail, ". . . the young woman reacts to her value-behavior discrepancy by a denial which baffles many adults." Some girls also feel that "taking precautions" involves a loss of reputation. "It might not be bad to have intercourse, but to plan ahead might label one as promiscuous. Sex as a result of uncontrolled emotion seems more acceptable than deliberately taken precautions" (Nye, 1977:114).

INEFFECTIVE USE: It is important to realize that even among those teens who do use some form of contraception, a majority do not use the most effective methods. Both the 1971 and the 1976 Johns Hopkins studies asked sexually active, never-married teens what contraceptive method they had used most recently. In 1976, almost half of the teens relied upon the condom or withdrawal, while only one quarter used the pill and less than 2% used an IUD. Hence the women who engage in sexual activity and use a contraceptive method tend to rely on an ineffective method—rhythm—or rely on their partners to use male-initiated methods—the condom or withdrawal—which demand knowledge and skill for effectiveness.

There are three necessary conditions then, for the effective use of contraceptives: (1) information about pregnancy risks and contraceptive methods; (2) access to contraceptive services; and (3) commitment to the use of contraceptives prior to the sexual engagement. The previous discussion of the nonuse or the use of ineffective contraceptives by teens underscores the importance of these factors. Each of these factors is necessary if the adolescent is to utilize contraceptives effectively at each sexual encounter. Adolescents must be able to engage in frank conversations with adults if they are to obtain accurate information on pregnancy risk and contraceptives. Access to contraceptive services may be limited by geographic location, economics, or an unwillingness on the part of the adolescent to acknowledge the probability of a sexual encounter. Finally, even if the teen is informed about contraceptives and has access to them, the adolescent may not take contraceptive action prior to a sexual encounter due to moral, medical, or hedonistic objections. Both nonuse of contraceptives and ineffective use of contraceptives are major factors in the rise in teenage pregnancies in the U.S. and Kentucky.

Deliberate Pregnancy

Adolescents sometimes see pregnancy as an answer to a variety of personal problems. Some use pregnancy as an act of rebellion against parents, and others become pregnant in a search for love or someone for whom they can care. Pregnancy can also be a means of gaining independence from an undesirable home environment or gaining attention from boyfriends or parents.

Contrary to conventional wisdom, most adolescent pregnancies are unintended and unwanted. Only 9.3% of females aged 15 to 19 reported that they failed to use contraceptives because they "didn't mind getting pregnant," and only 6.5% reported that they had deliberately attempted to become pregnant. Deliberate pregnancy, then, constitutes a relatively small portion of adolescent pregnancies.

Whether a young women becomes pregnant intentionally or unintentionally, however, she faces a number of decisions. These decisions have implications for her future, the future of her child, the future of the child's father, and the larger society. The next section will explore some of the consequences of teenage pregnancy.

Resolution of Adolescent Pregnancy

More than 600,000 15 to 19 year olds become pregnant each year in the U.S., and an additional 12,000 women under the age of 15 also become pregnant annually. How are these pregnancies resolved? Of 100 women aged 15 to 19 who became pregnant in 1976 (Alan Guttmacher Institute, 1976):

- 28 conceived and had their children within a marriage;
- 27 terminated their pregnancies through induced abortions;
- 21 had children born out-of-wedlock;
- 14 had miscarriages; and
- 10 conceived out-of-wedlock but married prior to birth.

Of 100 women under the age of 15 who conceived in 1976:

- 45 terminated their pregnancies through induced abortion;
- 36 had children born out-of-wedlock;
- 13 had miscarriages; and
- 7 conceived out-of-wedlock but married prior to birth.

In all of these cases except miscarriage, the resolution of the adolescent pregnancy is based on a decision that has been made by the pregnant adolescent and significant others—such as parents, counselors, or friends. In this section we will examine some of the trends and important factors relevant to the alternatives confronting the pregnant adolescent.

Abortion

Abortion is selected by more than 300,000 women under the age of 20 each year. It is estimated that one-third of the legal abortions in the U.S. between 1971 and 1975 were to women under the age of 20. The abortion rate (the number of abortions occurring to every 1,000 women in a particular age category, such as 15-19) permits a comparison of the rate of pregnancy termination by groups of women in different age categories. In 1975, the abortion rate was 32 per 1,000 women aged 15-19 compared to a rate of 19 per 1,000 women aged 20-44; and for women under the age of 15, there are now more abortions than live births (rate of 1,156 per 1,000 live births in 1974). As Baldwin (1980) notes: "Abortion has become a major form of fertility control for adolescents."

Abortion rates for teens (15-19) vary by state. In 1975 these rates ranged from 1 per 1,000 in Mississippi to 57 per 1,000 in California. Since adolescent behavior probably does not vary greatly from state to state, it is likely that differences in the availability of legal abortions account for these geographic variations. Abortions are usually performed in larger metropolitan areas, and teens living in states with only a few cities may find it difficult to travel to areas where abortions may be obtained. Additionally, by 1979, only 32 states and the District of Columbia had affirmed the right of women under 18 to obtain an abortion without parental consent. Despite the

1972 Supreme Court decision on abortion, in many areas abortions are not available to adolescents as a mechanism for terminating pregnancies.

Although not widely understood, abortion is a medical procedure with low risk. In fact, the medical risks of abortion are considerably lower than those associated with childbirth. Baldwin (1980) states only one percent of the legally performed abortions in the U.S. result in major complications. However, the risks associated with abortion vary according to the length of the pregnancy (period of gestation) and the type of procedure. Teens are overrepresented among women receiving abortions late in the pregnancy, and therefore, they are more likely to encounter medical complications. Because teens have less experience in recognizing the symptoms of pregnancy, have difficulty in resolving interpersonal conflicts about pregnancy and abortion, fear the reaction of parents and others to the news of their pregnancy, and are not familiar with health care systems, they are likely to be among persons seeking an abortion late in their pregnancy.

The decision to terminate a pregnancy through abortion is often a difficult one to make. There is a considerable amount of conventional wisdom as to the psychological and emotional consequences of abortion. However, research on women who terminated their pregnancies reveals no long-term negative psychological effects. In fact, some have argued that the psychological consequences of abortion are related to the woman's perception of how significant others (family and friends) evaluate her action.

Marriage and Adoption

Many teens decide not to terminate their pregnancy. Many teens who conceive out-of-wedlock choose to have the baby, in some cases after marrying and in other cases without the benefit of marriage. The distribution of births between these categories has changed considerably since 1960 as a result of other social changes. Nationally, while the proportion of teen births ***conceived*** out-of-wedlock has remained at about 50% since 1960, the proportion ***born*** out-of-wedlock increased substantially from 35% in 1960 to 65% in 1974.

Not only are pregnant adolescents deciding to forego marriage, they are also rejecting adoption as a line of action upon birth. In 1971, among those adolescents who gave birth out-of-wedlock, 87% kept their children, 5% sent the child to live with others, and only 8% gave the child up for adoption. Many more teens may be keeping their children because of changing social attitudes; it is now more acceptable to have and keep a child born out-of-wedlock, and the female head of household is no longer a unique phenomenon. However, the adolescent, whether married or not, who decides not to terminate her pregnancy faces a number of health, social, psychological, and emotional consequences.

Consequences of Adolescent Childbearing

Adolescent childbearing usually has serious consequences for the individual and the larger society. These consequences may threaten the life of the mother and the child as well as their economic, social, and psychological well-being. In addition, adolescent childbearing is rarely a private affair. It has implications for the society which may, in some instances, have to assume some of the responsibility for the mother and her child. In this section, the medical and nonmedical consequences of adolescent childbearing are examined.

Medical Consequences

A primary concern of adolescent childbearing involves the medical risks to the mother and the child. Any woman who bears a child is subject to a number of medical risks. However, adolescents disproportionately face a greater risk of many medical complications such as toxemia, anemia, and prolonged labor. Adolescents also face a greater risk of death during childbearing. The maternal mortality rate is highest for women under 15 and nearly as high for those aged 15 to 19. The death rate from complications of pregnancy, birth, and delivery is 60% higher for teens under 15 and it is 13% higher for women 15 to 19 than for women in their early twenties. The only other group of women with risk factors approaching adolescent levels are those aged 40 to 44.

It is not just the biological immaturity of adolescents which leads to pregnancy complications. While maternal age may be related to increased incidence of complications, there are other important factors. For example, inadequate prenatal care is a significant factor in adolescent pregnancy complications. Seven out of ten pregnant adolescents under the age of 15 do not get any prenatal care through the first trimester, and nearly one-fourth of these women either get no prenatal care or delay it until the end of pregnancy. While it is possible that some of these women do not seek medical care because they are ashamed of their situation, their socioeconomic status is a more significant factor. Many adolescents, especially nonwhites, cannot afford prenatal care from private physicians; and in 22 states, a low income pregnant woman is not eligible for public assistance until ***after*** delivery. Clearly, if these women do not have an income sufficient to pay for private health care, prenatal care often becomes a luxury they cannot afford.

Babies born to adolescent mothers face greater health hazards than those born to women in their early twenties.

Babies born to teens are more likely to die, especially during the first year of life. The infant mortality rate for babies born to white mothers under 15 is about 48 per 1,000 compared to 21 per 1,000 for infants of mothers aged 20 to 24. For nonwhites, the infant mortality rate for babies born to mothers under 15 years of age is 65 per 1,000 compared to 40 per 1,000 for babies born to mothers aged 20 to 24. These figures hide important differences since broad age categories are used; infant mortality rates are much higher for 15 or 16 year olds than for those 19.

Children of adolescent mothers are also at greater risk of prematurity and low birth weight (2,500 grams or 5.5 pounds or less). Low birth weight and prematurity are partial explanations for the higher infant mortality rates and the higher incidence of birth defects (mental retardation, spinal injury, breathing difficulties, epilepsy, deafness, blindness, and cerebral palsy) among infants born to teenaged mothers.

As with health risks to the mother, the higher health risks to children are not due solely to the biological immaturity of the mother. Factors such as inadequate nutrition during gestation and during the first year of life, minimal prenatal and postnatal care, and environmental hazards to the newborn represent more important variables in the health risks to the children of teens. Hence, adolescent pregnancy represents a substantive health hazard to both the child and the mother.

Nonmedical Consequences

Adolescent pregnancy involves a number of nonmedical consequences. Young women, as well as young men, who become parents at an early age may not be able to achieve the quality of life they desire. Early pregnancy and early marriage can seriously affect life chances and may be a threat to marital stability and psychological well-being. In some instances, society ends up sharing the responsibility of adolescent pregnancy.

LOSS OF SOCIOECONOMIC OPPORTUNITIES: Pregnancy often interrupts the education of the young mother as well as the father if he shares the responsibility of parenthood. One-half to two-thirds of all female dropouts report pregnancy and/or marriage as the primary reason for leaving school. Numerous studies indicate that teenage mothers are less likely to complete high school, averaging two fewer years of schooling than classmates who had not had children. Can we attribute this to lower educational aspirations? Not completely. Studies indicate that many adolescent mothers hope to complete high school and some plan to acquire some higher education. Does the educational gap close in later life? Limited evidence indicates that young mothers never catch up with peers who did not bear children in adolescence. Therefore, despite the desire to continue their education, many adolescents discover that pregnancy is a permanent disruption of their educational careers.

Despite federal legislation prohibiting schools which receive any federal funds from excluding students on the basis of pregnancy, there is considerable variation in local school district practices. In some areas, pregnant teens attend regular classes. In other areas, special services are offered, and pregnant teens are encouraged to continue their education in separate facilities or at home. However, in some schools, pregnant women are still pressured to leave. It is important to realize that even if special programs are available to pregnant teens or they are encouraged to remain in school, the demands of child care make it difficult to remain in school or to return after childbirth.

Since educational attainment is closely associated with employment opportunities, adolescent pregnancy also has economic consequences. One study found that at one and five years after high school, adolescent mothers tended to have less prestigious jobs, have lower incomes, and were less satisfied with their jobs than women who had not experienced an adolescent pregnancy. For males, early parenthood often means early entrance into the labor force. Males and females who become parents during adolescence are overrepresented in blue-collar jobs and underrepresented in professional occupations. One longitudinal study of Detroit couples found that those who had married when the bride was already pregnant had lower earnings and fewer assets than those who had not. Thus, adolescent pregnancy can have serious educational and economic repercussions.

MARITAL INSTABILITY: Couples who marry during adolescence have much higher rates of divorce, separation, and abandonment. Adolescent marriages are two to three times more likely to end than marriages occurring among persons who are at least 20. Women who marry before the age of 20 are also less likely to remarry; if they do remarry, they are more likely to experience a second marital dissolution. The chances for a successful marriage are especially limited if there is a premarital pregnancy; as a study of Baltimore teens reveals, one-fifth of their marriages broke up within one year, and fully 60% had ended within six years.

Problems of adolescent marriage include: feeling robbed of adolescence, lowered educational or social attainment, mistrust of the marital partner, low self-esteem, depression, and withdrawal. The underlying reason for these problems may be attributed to the economic position of these young couples. Early marriage and premarital pregnancy often result in limited educational opportunities and economic advancement. Various studies report that women who bear children during

adolescence have more children, have them closer together, and have more unwanted children than those who postpone childbearing till later. These additional births, especially if unwanted, can put added pressure on the economic resources of the couple and thereby exacerbate marital instability.

EMOTIONAL COSTS: Adolescent pregnancy is a time of great psychological stress. Early motherhood represents an early transition into the adult role. It is a type of transition which departs from socially accepted behavior and so is, in itself, inherently stressful. Additionally, the pregnant adolescent often suffers from doubt, loneliness, and a sense of helplessness.

Motherhood can be very demanding on the adolescent, especially if she is without emotional support from family, friends, or the child's father. Adolescent pregnancy often means that a young woman must try to cope with four major role transitions at once—adolescence and pregnancy combined with marriage and motherhood. Coping with any one of these creates considerable stress, uncertainty, and emotional turmoil; and trying to cope with all four may seem insurmountable.

SOCIAL COSTS: Adolescent pregnancy is often assumed to be a private or personal problem, yet it is also a social issue. When adolescents fail to achieve their educational and occupational objectives, the result is a loss of human potential. Early, unwanted pregnancy affects the eventual social class position of the woman or couple and influences the development of other adult social roles. These are the more intangible social consequences of adolescent pregnancy.

More directly, since early pregnancy is associated with lower educational attainment and accompanying lower socioeconomic status, society bears a direct cost in increased human service needs. It is estimated that in 1975 half the funds disbursed to the Aid to Families with Dependent Children program (AFDC) went to households containing women who bore their first child during their teens. Additionally, given the association between adolescent pregnancy and infant mortality and morbidity (incidence of disease and illness), society bears a higher cost of health services due to the rate of teenage pregnancy. Adolescent pregnancy, then, is more than a matter between a young woman and her family; it is a social issue.

Strategies for Intervention

> ". . . there is considerable justification for the growing concern about adolescent childbearing because of the negative outcomes so often experienced by the mother, child, and others involved. It is difficult to find anything that is not better when birth is postponed" (Baldwin, 1980:31).

As Baldwin and others have noted, the magnitude of the problem of adolescent childbearing, in numbers and in the ripple effect of its consequences, begs for intervention. While national studies indicate that sexual activity among teenagers is increasing, it is typically of a sporadic nature. Additionally, most adolescents make at least some attempt to avoid pregnancy. Unfortunately, inadequate knowledge of their own biological processes, inadequate information as to the availability and efficacy of contraceptives, and barriers to contraceptive services doom a large number of these attempts to avoid pregnancy. What strategies then are available for responding to this problem?

Adolescent knowledge of reproduction and birth control is extremely superficial. In 1975, only 29 states and the District of Columbia had mandated health education in public schools. Of these only 6 states, including Kentucky and the District of Columbia, required teaching some form of family life or sex education. Unfortunately, what most schools teach is too little, too late. Where sex education is taught, only 39% include anything about birth control. Other states may "encourage" such courses, but in many instances policies at either the state or local levels restrict such courses by demanding written consent from parents. Therefore, it is not surprising that many adolescents are misinformed concerning reproduction and contraception since, for many, their only source of information is friends.

One objection often raised to providing sex and birth control education in school is that it is a parental responsibility. While parents have the right to provide such information, they do not seem to be assuming the responsibility to do so. One study indicated that only a small percentage of young people receive birth control information from parents—5.5% of females and 3.1% of males. In the Baltimore study, although more than half the mothers had attempted to talk with their adolescent daughters about sex, they were inclined to give general advice and warnings; i.e., "Don't get mixed up with boys," or "Don't do anything you'll be sorry for later." Additionally, while many parents may recognize that specific birth control information is needed, they are frequently poorly informed themselves. Finally, many parents prefer not to acknowledge that their daughters are sexually active; and to discuss contraception or the need for responsible sexual activities would mean having to acknowledge the undesirable.

The other major argument against sex and birth control education in the schools is that such information will lead to the initiation of sexual activity at an earlier age. Research is limited in this area, yet to date there is no evidence to support this assertion. One study of college students revealed that knowledge of contraception was not related to whether sexual activity had begun before

the age of 18; instead, knowledge of contraception was associated with a more realistic assessment of the responsibilities of and options attendant upon sexual activity.

Even though a majority of adults approve the provision of family planning services to teenagers, these services are not uniformly available. In some instances there are legal restrictions (such as parental approval) to the provision of family planning services to adolescents. In other cases, teens do not ***perceive*** the services to be either available or convenient.

One program, the St. Paul Maternal and Infant Care Project, set up a clinic in 1973 in a local high school. The clinic provided not only family planning services (such as contraceptive information and pregnancy testing) but also general health education and care (such as immunizations, a weight-control program and physicals). After three years, the annual birth rate among the students had declined from 79 to 35 births per 1,000. On the basis of these results, adolescent health and sexuality courses have been established in all St. Paul (MN) junior high schools.

Adult silence on adolescent sexuality and contraception or simple admonitions not to engage in sexual activity leave the female adolescent embroiled in the social pressure cooker with a choice between abstinence or the unknown, but certainly high, risk of pregnancy. An approach which includes a discussion of the moral, physical, emotional, and social consequences of adolescent sexual activity and pregnancy, as well as a discussion of contraception, is likely to be the most effective form of guidance to assist adolescents in making informed and responsible decisions about their sexual behavior. This may well describe the content of an ideal course in human sexuality.

The decisions to engage in sexual activity or to utilize a contraceptive are related to an adequate information base. Adolescents must understand their own sexuality, the risks of pregnancy, and the characteristics of different methods. But information alone is not enough. The availability of health and family planning services is also crucial to an informed decision-making process. Unfortunately, adolescent childbearing trends in Kentucky and the U.S. suggest that many teens do not have the information or the access to services they so desperately need.

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